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NOTICE OF ALLOWANCE AND FEE(S) DUE

23696

7590

12/22/2010

QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

NGUYEN, KILAI MINH

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 12/22/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,040	09/29/2003	Durga Prasad Malladi	030245	2580

TITLE OF INVENTION: SYSTEMS AND METHODS FOR USING SELECTABLE FRAME DURATIONS IN A WIRELESS COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/22/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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2366 7590 12/22/2010

QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/22/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, KHAI MINH	2617	455-442000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB-122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB-47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			NGUYEN, KILAI MINH	
			ART UNIT	PAPER NUMBER

2617

DATE MAILED: 12/22/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 126 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 126 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/674,040

Examiner

KHAI M. NGUYEN

Applicant(s)

MALLADI ET AL.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/03/2010.
2. ☒ The allowed claim(s) is/are 4,10-12,14-18,20-30 and 32-57.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 10/28/2010
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/AJIT PATEL/
Primary Examiner, Art Unit 2617

DETAILED ACTION

Allowable Subject Matter

1. Claims 4, 10-12, 14-18, 20-30, and 32-57 are allowed.

The following is an examiner's statement of reasons for allowance:

Applicant's independent claim 4: The present in invention is directed to a wireless communication system, the independent claim identifies the patentably distinct feature "wherein the network is configured to direct the mobile station to enter or leave soft handoff; and wherein the mobile station is configured to modify a transmission parameter in response to the network directing the mobile station to enter or leave soft handoff, wherein the transmission parameter comprises a frame size, wherein if the mobile station is directed to enter soft handoff, the frame size is set to a first size and wherein if the mobile station is directed to leave soft handoff, the frame size is set to a second size, wherein the first size is greater than the second size, and wherein the first size is 10 ms and the second size is 2 ms". Applicant's independent claim 4 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 10: The present in invention is directed to a mobile station configured to operate in a wireless communication system, the independent claim identifies the patentably distinct feature "a processing subsystem configured to set a transmission parameter of the wireless link, wherein the transmission parameter comprises comprising a frame size defining a time over which a frame of data is transmitted, wherein the processing subsystem sets the frame size to a

first value or a second value in response to detecting that the mobile station is entering or leaving soft handoff; and wherein the transceiver subsystem is further configured to transmit data on a reverse link of the wireless link in accordance with the frame size".

Applicant's independent claim 10 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 15: The present in invention is directed to a mobile station configured to operate in a wireless communication system, the independent claim identifies the patentably distinct feature "wherein the processing subsystem is configured to set a transmission parameter of the wireless link for the transceiver subsystem in response to detecting that the mobile station is entering or leaving soft handoff, to detect that the mobile station is entering or leaving soft handoff based upon a received handoff direction message (HDM), to set the transmission parameter to a first value if the HDM directs the mobile station to enter soft handoff, and to set the transmission parameter to a second value if the HDM directs the mobile station to leave soft handoff, wherein the transmission parameter comprises a frame size defining a time over which a frame of data is transmitted, and wherein the first value is greater than the second value". Applicant's independent claim 15 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 18: The present in invention is directed to method implemented in a wireless communication system, the independent claim identifies the patentably distinct feature "detecting a mobile station communicating via a wireless link entering or leaving soft hand off; and modifying a transmission parameter of the wireless

link for the mobile station in response to detecting the mobile station entering or leaving soft handoff; wherein the transmission parameter comprises a frame size defining a time over which a frame of data is transmitted, wherein if the mobile station is detected entering soft handoff, the frame size is set to a first size and wherein if the mobile station is detected leaving soft handoff, the frame size is set to a second size".

Applicant's independent claim 18 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 21: The present in invention is directed to a method implement in a wireless communication system, the independent claim identifies the patentably distinct feature "detecting a mobile station entering or leaving soft handoff; and modifying a transmission parameter for the mobile station in response to detecting the mobile station entering or leaving soft handoff, wherein the transmission parameter comprises a frame size, wherein if the mobile station is detected entering soft handoff, the frame size is set to a first size and wherein if the mobile station is detected leaving soft handoff, the frame size is set to a second size, wherein the first size is greater than the first size, and wherein the first size is 10 ms and the second size is 2 ms". Applicant's independent claim 21 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 27: The present in invention is directed to a method implemented in a mobile station, the independent claim identifies the patentably distinct feature "detecting that the mobile station is entering or leaving soft handoff; if the mobile station is entering soft handoff, setting a transmission parameter of the

wireless link to a first value; and if the mobile station is leaving soft handoff, setting the transmission parameter of the wireless link to a second value; wherein the transmission parameter comprises frame size defining a time over which a frame of data is transmitted". Applicant's independent claim 27 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 33: The present in invention is directed to a method implemented in a mobile station, the independent claim identifies the patentably distinct feature "detecting that the mobile station is entering or leaving soft handoff; if the mobile station is entering soft handoff, setting a transmission parameter to a first value; and if the mobile station is leaving soft handoff, setting the transmission parameter to a second value, wherein the transmission parameter comprises a frame size, wherein the first value is greater than the second value, and wherein the first value is 10 ms and the second value is 2 ms". Applicant's independent claim 33 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 34: The present in invention is directed to a method and apparatus implemented in a wireless communication system, the independent claim identifies the patentably distinct feature "means for detecting that a mobile station communicating via a wireless link is entering or leaving soft handoff; means for setting a transmission parameter of the wireless link to a first value if the mobile station is entering soft handoff; and means for setting the transmission parameter of the wireless link to a second value if the mobile station is leaving soft handoff, the transmission parameter comprising a frame size defining a time over which

a frame of data is transmitted". Applicant's independent claim 34 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 39: The present in invention is directed to an apparatus for wireless communication, the independent claim identifies the patentably distinct feature "means for detecting that a mobile station is entering or leaving soft handoff; means for setting a transmission parameter to a first value if the mobile station is entering soft handoff; and means for setting the transmission parameter to a second value if the mobile station is leaving soft handoff, the transmission parameter comprising a frame size, wherein the first value is 10 ms than the second value is 2 ms". Applicant's independent claim 39 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 41: The present in invention is directed to non-transitory processor-readable medium including instructions stored thereon, the independent claim identifies the patentably distinct feature "instructions for detecting that a mobile station communicating via a wireless link is entering or leaving soft handoff; instructions for setting a transmission parameter of the wireless link to a first value if the mobile station is entering soft handoff; and instructions for setting the transmission parameter of the wireless link to a second value if the mobile station is leaving soft handoff, the transmission parameter comprising a frame size defining a time over which a frame of data is transmitted". Applicant's independent claim 41 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 53: The present in invention is directed to an apparatus for wireless communication system, the independent claim identifies the patentably distinct feature "means for detecting a mobile station communicating via a wireless link entering or leaving soft handoff; and means for modifying a transmission parameter of the wireless link for the mobile station in response to detecting the mobile station entering or leaving soft handoff; wherein the transmission parameter comprises a frame size defining a time over which a frame of data is transmitted, wherein if the mobile station is detected entering soft handoff, the frame size is set to a first size and wherein if the mobile station is detected leaving soft handoff, the frame size is set to a second size". Applicant's independent claim 53 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 54: The present in invention is directed to a non-transitory processor-readable medium including instructions stored thereon, the independent claim identifies the patentably distinct feature "instructions for detecting a mobile station communicating via a wireless link entering or leaving soft handoff; and instructions for modifying a transmission parameter of the wireless link for the mobile station in response to detecting the mobile station entering or leaving soft handoff; wherein the transmission parameter comprises a frame size defining a time over which a frame of data is transmitted, wherein if the mobile station is detected entering soft handoff, the frame size is set to a first size and wherein if the mobile station is detected leaving soft handoff, the frame size is set to a second size". Applicant's independent

claim 54 comprises a particular combination of elements, which is neither taught nor suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pussinen (U.S.Pat-6532363) discloses Method and arrangement for transferring special cell information in a cellular system.

Jung (U.S.Pat-6049716) discloses Soft swap handoff method in CDMA cellular system.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang can be reached on 571.272.7667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AJIT PATEL/
Primary Examiner, Art Unit 2617

/Khai M Nguyen/
Examiner, Art Unit 2617

12/15/2010